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M'PHUN'S

Wallace

CATECHISM

OF

PHRENOLOGY,

ILLUSTRATIVE OF THE

PRINCIPLES OF THAT SCIENCE.

Andrew Combe

BY A MEMBER OF

THE PHRENOLOGICAL SOCIETY OF EDINBURGH.

GLASGOW:

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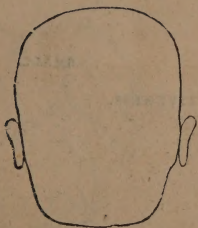
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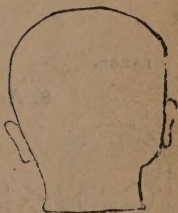
GEORGE COMBE, Esq.**LATE PRESIDENT OF THE PHRENOLOGICAL SOCIETY,****THIS WORK IS RESPECTFULLY INSCRIBED,****BY HIS OBEDIENT SERVANT,****THE AUTHOR.**

PHRENOLOGICAL ORGANS.

1. AMATIVENESS.

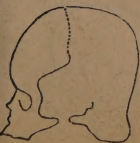


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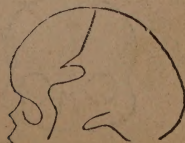


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2. PHILOPROGENITIVENESS.

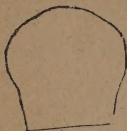


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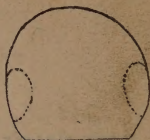


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5. COMBATIVENESS.

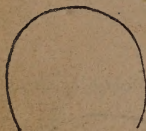


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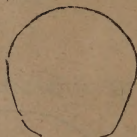


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6. DESTRUCTIVENESS.

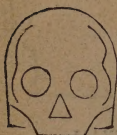


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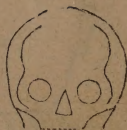


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8. ACQUISITIVENESS.

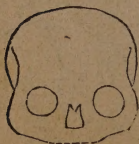


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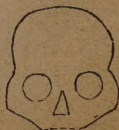


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9. CONSTRUCTIVENESS.



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10. SELF-ESTEEM.

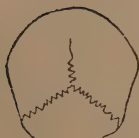


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12. CAUTIOUSNESS.



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13. BENEVOLENCE.



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14. VENERATION.



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15. FIRMNESS.



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16. CONSCIENTIOUSNESS.



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21. IMITATION.



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22. INDIVIDUALITY.



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30. EVENTUALITY.



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32. TUNE.

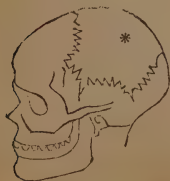


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SIX SKULLS OF DIFFERENT NATIONS.

1. *New Hollander.*2. *North American Indian.*3. *New Zealander.*4. *Ancient Greek.*5. *Well Formed Negro.*6. *European.*

NAMES

OF THE PHRENOLOGICAL ORGANS REFERRING TO THE FIGURES
INDICATING THEIR RELATIVE POSITIONS.

AFFECTIVE.

I. PROPENSITIES.

1. Amativeness.
2. Philoprogenitiveness.
3. Concentrativeness.
4. Adhesiveness.
5. Combaticiveness.
6. Destructiveness.
- + Alimentiveness.
7. Secretiveness.
8. Acquisitiveness.
9. Constructiveness.

II. SENTIMENTS.

10. Self-Esteem.
11. Love of Approbation.
12. Cautiousness.
13. Benevolence.
14. Veneration.
15. Firmness.
16. Conscientiousness.
17. Hope.
18. Wonder.
19. Ideality.
20. Wit or Mirthfulness.
21. Imitation.

INTELLECTUAL.

I. PERCEPTIVE.

22. Individuality.
23. Form.
24. Size.
25. Weight.
26. Colouring.
27. Locality.
28. Number.
29. Order.

30. Eventuality.
31. Time.
32. Tune.
33. Language.

II. REFLECTIVE.

34. Comparison.
35. Causality.

NAMES AND ORDERS

OF THE

ORGANS CONTAINED IN DR. SPURZHEIM'S "PHRENOLOGY,"
PUBLISHED IN 1815.

ORDER I.—FEELINGS.

GENUS I.—PROPENSITIES.

1. Amativeness.
2. Philoprogenitiveness.
3. Concentrativeness.
4. Adhesiveness.
5. Combaticiveness.

6. Destructiveness.
7. Constructiveness.
8. Acquisitiveness.
9. Secretiveness.

GENUS II.—SENTIMENTS.

I. *Sentiments common to Man with the Lower Animals.*

- | | | |
|--------------------------|--|-------------------|
| 10. Self-esteem. | | 12. Cautiousness. |
| 11. Love of Approbation. | | 13. Benevolence. |

II. *Sentiments proper to Man.*

- | | | |
|-----------------|--|------------------------|
| 14. Veneration. | | Wonder. |
| 15. Hope. | | 17. Conscientiousness. |
| 16. Ideality. | | 18. Firmness. |

ORDER II.—INTELLECTUAL FACULTIES.

GENUS I.—EXTERNAL SENSES.

- | | | |
|-------------------|--|----------|
| Feeling or Touch. | | Hearing. |
| Taste. | | Sight. |
| Smell. | | |

GENUS II.—INTELLECTUAL FACULTIES *which perceive Existence.*

- | | | |
|--------------------------------|--|----------------|
| 19. Individuality. | | 21. Size. |
| 1. <i>Upper Individuality.</i> | | 22. Weight. |
| 2. <i>Lower Individuality.</i> | | 23. Colouring. |
| 20. Form. | | |

GENUS III.—INTELLECTUAL FACULTIES *which perceive the relations of External Objects.*

- | | | |
|---------------|--|---------------|
| 24. Locality. | | 27. Number. |
| 25. Order. | | 28. Tune. |
| 26. Time. | | 29. Language. |

GENUS IV.—REFLECTING FACULTIES.

- | | | |
|-----------------|--|----------------|
| 30. Comparison. | | 32. Wit. |
| 31. Causality. | | 33. Imitation. |

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INTRODUCTION.

What is Phrenology?

A system of Philosophy, the fundamental principles of which are, that the *brain* is the organ of the *mind*, and that different parts of the *brain* have different functions.*

Can you prove the brain to be the organ of the mind?

Yes. The most undoubted evidence exists that all mental manifestation emanates from the brain.

Would you state some facts that lead to that conclusion?

First, Inflammation of the brain is uniformly attended with delirium, and with the removal of the inflammation the delirium ceases.

Second, Pressure upon the brain, as from a depressed portion of skull, instantly produces insensibility, and the removal of the pressure restores the individual to his wonted powers.

* The term Phrenology literally means, *doctrine of the mind*: as a science, Phrenology treats of the mental powers, and the relationship which these powers bear to certain corporeal conditions.—See “*Philosophy of Phrenology Simplified*.”

Third, When the brain is imperfectly developed, although all the other organs of the body be well formed, idiocy is the invariable consequence.

Do Phrenologists admit the brain to be a single organ?

No. It is a fundamental principle of the science that the brain is a congeries of organs, or organic apparatuses, through each of which a distinct power of the mind is manifested.

Is this a mere supposition of Phrenologists?

No. It is a conclusion derived from the existence of mental phenomena, which cannot be explained satisfactorily upon any other principle, and is at the same time not inconsistent with the true structure of the brain.

Mention some of the phenomena which go to prove the brain to be an aggregate of parts, each performing a particular function.

First, The mental powers are not equally developed at the same time, but appear in succession, as the different parts of the brain to which they belong become successively developed.

Second, Genius is generally partial. For example, a person may possess a strong genius for poetry or music, and be totally destitute of any for metaphysics or mathematics.

Third, In dreaming, some of the faculties are awake, while others are asleep; now, if they were all manifested through one and the same organ, it would be absolutely impossible for them to appear in such opposite states at one and the same time.

Fourth, In partial insanity, there is a great defi-

ciency in the operations of some of the faculties, while the others remain powerful and healthy.

Fifth, When the brain is injured, all the mental faculties are not equally affected, but one or more, in particular, manifest an evident disturbance in their functions.

Sixth, The brain, during its growth, undergoes various changes of form, each change corresponding to the permanent condition of the organ in various orders of inferior animals.*

Who was the founder of this system?

The late Dr. Gall of Vienna.

Give a short account of the manner in which he was led to its discovery.

By the circumstance that such of his fellow-students at College as possessed a great talent of learning to repeat words, had prominent eyes; and he recollected that those distinguished for the same talent in the first school he attended, were characterized by a similar peculiarity. Reflecting, that if the memory for words was indicated by an external sign, he conceived that such might be the case with the other powers of the mind: and from that time observed strictly every individual who came under his scrutiny, remarkable for any peculiarity of talent or disposition. He visited asylums, prisons, and schools, and there studied the developments of the heads of those who were remarkable either for superior or deficient mental endowment. He likewise took every opportunity of examining the brains of those whose heads he had observed while alive, and found as a general

* See "Philosophy of Phrenology Simplified."

fact, that the surface of the brain corresponded to the form which the skull had presented during life. He thus collected, by the most indefatigable zeal, innumerable instances of development, and found out by degrees, that there was a concomitance between particular talents and dispositions, and particular forms of head. Fact, succeeding fact, to the establishment of his previous observations, he divulged his system at Vienna in lectures, in 1796.

Was any other person associated with him in his researches ?

Yes. Dr. Spurzheim commenced the study of the science under him in 1800, and in 1804 became the partner of his labours.

Has Dr. Spurzheim done much towards the advancement of Phrenology ?

Yes. He has made some discoveries on the anatomy and physiology of the brain, and formed his own observations, with those of Dr. Gall, into a beautiful system of mental philosophy. It is chiefly to his works and personal exertions, that we, in Britain, are indebted for a knowledge of the science.

Is Phrenology making much progress at the present day ?

Yes. It is daily gaining converts both at home and abroad ; it is supported by many of those who at one time entertained the most violent prejudices against it ; and the justness of its principles is acknowledged by many of the ablest writers of the age.

Phrenology, then, teaches that the brain is composed of a number of organs, each connected with a particular mental power ; does it likewise inform us whe-

ther the mind is an aggregate of separate powers, or a simple substance ?

It gives us no information whatever on this point ; phrenologists, however, with philosophers in general, imagine the mind to be a simple and indivisible substance.

Does phrenology, thus referring the mental powers to particular organs, not lead to materialism ?

By no means. Phrenology to do so must teach that the different cerebral parts, or some state of these, are the mind, which is not the case. It merely states that these are the *organs* of the mind, which in itself is a direct denial that phrenology leads to materialism. No one is weak enough to suppose that the auditory and optic nerves are hearing and seeing, they are nothing more than the *organs* of these senses ; in like manner the different cerebral parts are the *organs*, and merely such, of the mind.

Does phrenology, then, not necessarily lead into any inquiry concerning the material and spiritual connexion or the substance of the mind ?

No. These are questions which can only lead to vague and useless speculation.

How is the strength of each mental power judged of ?

By the size of the cerebral organ : for mental power is invariably, other conditions being equal, in proportion to cerebral development.

What other conditions do you refer to ?

1st, The constitution or quality of brain ; 2d, Temperament ; 3d, Particular combinations of organs ; and, 4th, Exercise.

How does the first condition affect this rule ?

By the manifestations of that brain which is naturally of a fine texture and vigorous constitution, being stronger than those of another of the same size, but which does not naturally possess these qualities.

How does the second condition affect this rule?

By imparting to the brain the peculiar state of activity, energy, durability of action, or torpidity, which appertains to the system generally.

How is it affected by the third condition?

By one set of faculties controlling or exciting to action another, and thereby diminishing or increasing the power with which they, under opposite circumstances, would manifest themselves. Thus, the propensities, if under the complete control of the higher sentiments, will, for want of exercise, be weak, compared with the same which are free from such restraint, and continually in a state of action; and a large development, for example, of *Love of Approbation*, by exciting to action any other faculty or faculties, will increase their power upon the same principle, &c. &c.

And how does the fourth condition affect it?

By increasing the vigour of one or more of the organs, which is effected upon the same principle that exercise invigorates the frame.

You have said that each mental power is judged of by the size of its respective cerebral organ. How do you ascertain the size of each of these organs, and of the brain as a whole?

By the size and particular development of the skull.

Does the skull, then, accurately represent the form of the brain?

In general with great accuracy, although the inner

surface of the skull may sometimes follow the shrinking of the brain, which takes place after the middle period of life faster than the outer, or it may become thinner in one part than another in old age, and thus cannot be considered a perfectly accurate index of the form of the brain. In infancy, again, the brain and skull are but imperfectly formed, and this state of life likewise comes under the same objection. The *frontal sinus* may likewise offer a slight obstacle to the cerebral development being observed in its situation.

What is the frontal sinus?

It is an opening caused by the divergence of the two plates of the frontal bone, occurring at the top of the nose.

Does it cover any phrenological organs?

Not before the age of eighteen, after which it sometimes extends over the spaces marked 22, 23, 24, and 25, on the busts, and, of course, throws some degree of uncertainty over the development of these organs.

What is the most proper period of life, then, to seek for demonstrative evidence of the science?

From the seventh to the eighteenth year; for at the first of these periods the brain attains its full size, and betwixt these periods the skull at every part is thin and interferes little with our observations.

Does the brain attain maturity of development at seven years of age?

The brain, at that period, attains its maximum of size, but the *consistency* of the cerebral mass increases with the age of the individual, and without the requisite consistency the organ cannot manifest continued and energetic mental powers.*

* See "Philosophy of Phrenology Simplified."

Does the skull not increase in thickness, and the frontal sinuses enlarge, with the age, to such a degree as to render correct observation of the size of the brain impossible?

No. For while the divergence from parallelism in the two plates of the skull does not exceed two-eighths of an inch at any period of life, the difference of size in different parts of the brain extend from one inch to one inch and a quarter.

How is a mental organ defined?

“A mental organ is a material instrument, by means of which the mind, in this life, enters into particular states, active and passive.”*

What is meant by the term Faculty, in Phrenology?

It is used as a convenient term for expressing particular states of the mind, when influenced by particular organs. Thus, the faculty of *Conscientiousness*, means every particular mode of feeling induced by the organ of *Conscientiousness*; that of *Benevolence*, the same with regard to the organs of that feeling, &c.

What is a primitive faculty?

A faculty may be considered primitive, “1st, Which exists in one kind of animals and not in another. 2d, Which varies in the two sexes of the same species. 3d, Which is not proportionate to the other faculties of the same individual. 4th, Which does not manifest itself simultaneously with the other faculties; that is, which appears and disappears earlier or later in life than other faculties. 5th, Which may act or rest singly. 6th, Which is propagated in a distinct manner from parents

to children ; and, 7th, Which may singly preserve its proper state of health or disease."*

Is it necessary to become acquainted with the anatomy of the brain, in order to become a practical Phrenologist?

By no means ; although it is highly advantageous.

Give a brief outline of that organ ?

The brain is an organ composed of two corresponding hemispheres, separated by a strong membrane, called the *falciform process* of the dura mater, and consists of an aggregate of parts, which manifest, as has already been observed, the different mental faculties. The two hemispheres generally correspond in form and functions, so that we have two organs, one in each hemisphere, for each mental power. The two hemispheres are brought into communication and co-operation with each other, by the Corpus Callosum, and other commissures. The Cerebellum, or little brain, in man, is situated below the brain at the back part of the head, and is separated from the latter by a dense membrane called the Tentorium. They are connected with each other by a body, called the Medulla Oblongata, and the whole cerebral mass consists of fibres, which radiate from the Medulla Oblongata to the periphery, where the convolutions are situated.†

Is the brain divided by lines into its various organs, in the manner as is delineated on the busts ?

No. " Each part is inferred to be a separate organ ; because its size *cæteris paribus*, bears a regular proportion to the energy of a particular mental power."

* Spurzheim.

† See " Philosophy of Phrenology Simplified."

DIVISION AND CLASSIFICATION.

How are the mental faculties divided?

Into two orders—the AFFECTIVE and INTELLECTUAL faculties. These again are divided into Genera: the former into two—the *Propensities* and the *Sentiments*; and the latter into three—the *External Senses*, the *Perceptive* and *Reflective Faculties*.

ORDER I.—FEELINGS.

GENUS I.—PROPENSITIES.

What is the nature of the faculties that come under the first genus?

Their nature is to produce a propensity of a specific kind. They do not form ideas, and are common to man with animals.

1. AMATIVENESS.

Where is the organ of Amativeness situated?

At the back part of the head, between the mastoid processes, and at the upper part of the neck. When large, it gives a thickness to the neck at these parts. That portion of the brain denominated the cerebellum, is the organ of this propensity.

What is the function of this faculty?

To give rise to the sexual feeling.

What is the reason that this feeling is little or not at all felt during the earlier periods of life?

Because the cerebellum, through which the feeling is manifested, is then but very imperfectly developed, and

does not attain its full consistency, or maturity of organization, till adult age.

What proportion does the cerebellum bear to the brain in new-born children, and in adults?

In the former, the proportion is as one to thirteen, fifteen, or twenty: in the latter, as one to six, seven, or eight.

Is there any difference in the proportion between this organ and the brain in males and females in general?

In males it generally bears a greater proportion to the brain than in females.

Where are remarkable developments of it to be found?

In the casts of Mitchell, Dean, and Raphael, where it is very large. In that of Dr. Hette, very small.

Is this organ established?

Yes.

Is this feeling liable to be abused?

Yes. By every improper, unlawful, or criminal mode of gratification.

When under the influence of the higher powers, does this feeling lead to useful results?

Yes. To marriage, and to the cultivation of the domestic affections.

2. PHILOPROGENITIVENESS.

Where is the organ of Philoprogenitiveness situated?

Immediately above the middle part of the cerebellum. When large, it gives a drooping appearance to the back part of the head.

What is the function of this faculty?

To produce an instinctive love of offspring in general. When the feeling is strong, the individual experiences great pleasure in beholding and caressing children.

Is this feeling distinct from that of Benevolence?

Yes. We frequently find it in those who are destitute of any compassionate feeling towards adults.

Is there any difference in the proportion between this organ and the brain in males and females in general?

Females possess it in the greatest proportion in general; and the female head is generally narrower than that of the male, and more elongated backwards.

To what does the over activity or excessive development of this organ lead?

To the pampering and spoiling of children, and to excessive grief for their loss.

Are there any nations which are remarkable for a large development of this organ?

Yes. The Hindoos, Negroes, and Charibs, have it in general very fully developed.

Is it established?

Yes.

3. CONCENTRATIVENESS.

Where is the organ of Concentrativeness situated?

Immediately above *Philoprogenitiveness*, and below *Self-Esteem*.

What is the function of this faculty?

Dr. Spurzheim considers it as yet conjectural, while Mr. Combe and others are led to suppose, that it bestows the power of concentrating two or more mental

powers, at one and the same time, towards any particular object.

How do they suppose it manifests itself in an author?

By a condensation of style, with a strict concatenation of ideas, a distinctness of relations, and unity of object, which are supposed by them to be the result of the influence of this faculty over the others.

What name does Dr. Spurzheim give it?

Inhabitiveness, from observing it to be large in those persons and animals who were attached to particular places.

4. ADHESIVENESS.

Where is the organ of Adhesiveness situated?

On each side of *Concentrativeness*, higher up than *Philoprogenitiveness*.

What is the function of this faculty?

To produce the instinctive tendency of attachment to objects, animate and inanimate. It gives to those in whom it is strong, an involuntary impulse to cling to the object of their affections, and they experience the greatest delight in a return of affection.

Do males or females possess it stronger in general?

Females generally possess it stronger.

When the feeling is very energetic, or very feeble, what are the results?

When very energetic, the individual feels excessive regret at being separated from a friend, or at leaving his country. When very weak, he has little or no attachment to mankind, and may become an anchorite or hermit.

Is it established?

Yes.

5. COMBATIVENESS.

Where is the organ of Combativeness situated?

At the inferior and posterior angle of the parietal bone, on each side of *Philoprogenitiveness*.

What is the function of this faculty?

To produce active courage, and, when the feeling is energetic, the propensity to attack. It inspires the mind with a feeling of boldness, supports it in facing, and prompts it to overcome opposition.

What are the results of the predominating energy, and of the deficiency of this faculty?

When very energetic, it gives rise to a desire for contention, a quarrelsomeness and fieriness of disposition, and a pleasure in fighting. When very weak, there is a general want of energy in the character.

In whom is the organ found large?

In the Charibs, King Robert Bruce, General Wurmser, David Haggart, and generally in those who are given to oppose either in word or deed.

Does this organ give only the tendency to fight?

By no means. It may show itself in a thousand ways besides that of fighting. Fighting is an abuse of the organ.

6. DESTRUCTIVENESS.

Where is the organ of Destructiveness situated?

Immediately above, and extending a little farther backward and forward from the external opening of the ear.

What is the function of this faculty?

To produce the impulse to destroy in general. It incites us to exterminate objects that *Combativeness*

leads to resist and overcome. Anger and rage are manifestations of it. In writing, it is essential to satire, and prompts the author to write cuttingly.

When this feeling is very energetic or very weak, what are the results?

When very energetic, wanton cruelty will result, if not controlled by the higher moral feelings; and when feeble, there is a want of fire in the constitution, and a feebleness of resentment, which the individual as well as others feel, who are apt to subject him to their defiance.

Where are remarkable developments of the organ to be found?

In the heads of Dean, Thurtell, King Robert Bruce, Bellingham, in cool and deliberate murderers, and in persons who delight in cruelty, where it is large; and in general in the Hindoos, small.

Is it established?

Yes.

Do all the inferior animals display this feeling in an equal degree?

No. In carnivorous animals, who live by the destruction of other animals, the feeling is strong, while in herbivorous animals the feeling is generally very weak.

Does the form of the brain in these animals differ?

It does; and to a remarkable degree.

In what does the difference consist?

In carnivorous animals, the broadest and most fully developed part of the brain is betwixt the ears, whereas in herbivorous animals this part is the narrowest.

ALIMENTIVENESS.

Where is the organ of Alimentiveness situated?

Probably at the zygomatic fossa, immediately under *Acquisitiveness*, and before *Destructiveness*. It is supposed to lead to the selection of food,—to be the organ of the instinct that prompts us to take nourishment. Its place is indicated by a cross on the new busts.—*See plate.*

7. SECRETIVENESS.

Where is the organ of Secretiveness situated?

Immediately above *Destructiveness*.

What is the function of this faculty?

To produce an instinctive tendency to conceal the various thoughts, emotions, and desires, that arise in the mind, until judged of by the understanding. It gives a prudence to the character, by imposing a restraint upon the other faculties, and serves as a defence against prying curiosity. It enables man and animals to avoid the assaults of enemies, when they are unable to repel them by force. In writing, it leads to irony, and, combined with the faculty of wit, gives a talent for humour.

When this feeling is very energetic or very feeble, what are the results?

When very energetic, and not regulated by strong intellect and moral feeling, it will give rise to cunning, instead of prudence, and may lead to the practice of lying and deceit, and, combined with *Acquisitiveness*, to theft. It supplies the cunning necessary for this latter avocation. When it is very feeble, there is a want of tact about the individual in his intercourse with

society; his thoughts and emotions are expressed without the least regard to time, place, or circumstances. Indeed, he cannot adapt, or experiences the greatest difficulty in adapting, the former to the latter.

Is it established?

Yes.

8. ACQUISITIVENESS.

Where is the organ of Acquisitiveness situated?

Before *Secretiveness* and below *Ideality*.

What is the function of this faculty?

To produce the desire to acquire and possess in general.

Is there any particular object to which it is directed?

No. It takes its direction from the other faculties which may lead it to desire the possession of pictures, antique coins, minerals, &c. as well as money.

What is the result of the predominating energy of this feeling?

Avarice, covetousness, dishonesty, and theft, are its abuses.

Where is the organ found large?

In Heaman. It is full in the cast of the Rev. Mr. Martin, and moderate in King Robert Bruce.

Is it established?

Yes.

9. CONSTRUCTIVENESS.

Where is the organ of Constructiveness situated?

Before *Acquisitiveness*, a little upward and backward from the outward angle of the eye.

What is the function of this organ?

To produce a tendency to construct in general ; but, like acquisitiveness, it takes its direction from the other faculties. For example, if combined with *Combative-ness* and *Destructiveness*, it will give a desire to construct implements of war—with predominating *Veneration* to erect places of religious worship, &c.

Is this faculty indispensable to a genius for mechanics ?

Yes.

Do the lower animals that build possess the organ large ?

Yes. It is large in the field mouse and beaver, and in all animals remarkable for constructive powers.

Where are remarkable developments of it to be found ?

In the casts and portraits of Raphael, Michael Angelo, Brunel, Haydon, and Herschel, where it is very fully developed. The New Hollanders in general have it small. Being indispensable to the talent for works of art of every description, it is found large in all those painters, sculptors, mechanics, and architects, who have distinguished themselves in their particular departments.

Is this organ established ?

Yes.

GENUS II.—SENTIMENTS.

What is the nature of the faculties belonging to the Second Genus of feelings ?

Their nature is to produce merely a *Sentiment* ; that is, a propensity combined with a feeling or emotion of

a certain kind. They do not form specific ideas. Some of them are peculiar to man, others common to him with the lower animals.

What are those sentiments possessed by man in common with the lower animals?

SELF-ESTEEM, LOVE OF APPROBATION, CAUTIOUSNESS, and BENEVOLENCE.

Can the term Sentiment be applied with propriety to any feeling that exists in the inferior animals?

Yes. For though such feelings exist in a feebler state, and in a more restricted condition, than in man, they are essentially of the same nature in both.

10. SELF-ESTEEM.

Where is the organ of Self-Esteem situated?

At the top and back part of the head, immediately above *Concentrativeness*.

What is the function of this faculty?

To produce self-love in general. It inspires the mind with a degree of confidence in its own powers, and when combined with superior sentiments and intellect, gives a dignity and greatness to the character.

How does it manifest itself when too active or largely developed?

In arrogance, pride, conceit, or egotism. Combined with *Love of Approbation*, also largely developed, it gives rise to envy; with *Destructiveness*, not directed by *Benevolence* and *Conscientiousness*, to a delight in exposing others' faults, and endeavouring to make them appear ridiculous or despicable.

What does a deficiency of the faculty produce?

Humility ; a want of confidence in one's powers, and a backwardness in acknowledging these.

Where are remarkable developments of the organ to be found ?

In the casts of David Haggart, Dempsey, and the Hindoos, where it is large. It is moderate in the casts of Dr. Hette and the American Indians.

Is it established ?

Yes.

11. LOVE OF APPROBATION.

Where is the organ of Love of Approbation situated ?

On each side of *Self-Esteem*, immediately above *Adhesiveness*.

What is the function of this faculty ?

To produce the love of the esteem, praise, or approbation of others.

Is there any particular direction in which gratification of it will be sought ?

No. This will depend altogether upon the other faculties. For example, if combined with superior sentiments and intellect, it will incite the poet, sculptor, warrior, and orator, to the acquisition of an honourable fame. With predominating *propensities*, inexpressible pleasure will be experienced in being considered the best fighter, or the greatest drinker among a number of individuals.

When the feeling is very energetic or very feeble, what are the results ?

When very energetic, the individual is apt to become extremely fidgety about what others think of him,

and in the greatest misery if a rival be praised in higher terms than himself. When very feeble, he cares little or nothing about the opinion entertained of him by others.

Where are remarkable developments of this organ to be found?

In the casts of King Robert Bruce, Dr. Hette, Clara Fisher, and the American Indians, where it is large. Such, likewise, is uniformly the case in bashful individuals; this disposition arising in a great measure from a fear of incurring disapprobation. It is deficient in the casts of Haggart and Dempsey.

Is it established?

Yes.

12. CAUTIOUSNESS.

Where is the organ of Cautiousness situated?

Near the middle of each parietal bone. It lies in a line between *Adhesiveness* and *Love of Approbation*, but farther forward than these.

What is the function of this faculty?

To produce the emotion of fear in general, it leads the individual to hesitate before he acts, and to trace the consequences that may ensue; and thus a moderate development of it is essential to a prudent and circumspect character.

What are the results of the predominating energy, and of the deficiency of this faculty?

When it predominates, it produces doubts and irresolution, and, when in a state of high excitement from internal causes, sensations of dread and apprehension, and the disease called *Hypochondria*. When it is de-

ficient, there is a want of fear in the character, and a tendency to act without mature deliberation.

Where are remarkable developments of it to be found?

In the casts of Dr. Hette and the Hindoos, where it is large. In those of Bellingham and Mary MacInnes, moderate. In that of General Wurmser, small.

May this faculty exist along with great personal courage?

Yes. Nothing is more common. Robert Bruce and Hannibal were remarkable for valour, while they, at the same time, possessed cautiousness in a high degree.

Is this organ established?

Yes.

13. BENEVOLENCE.

Where is the organ of Benevolence situated?

At the upper and towards the fore part of the head, immediately before the *fontanel* or *opening* of the head.

What is the function of this faculty?

To dispose to compassion and active benevolence ; to produce a desire for the happiness of others ; and charitably to view their actions.

Does a small development of the organ produce cruelty?

By no means. This is only followed by an indifference to the welfare of others ; although cruelty may result from an uncontrolled *Destructiveness*, which might not be the case if this faculty was powerful.

Where are remarkable developments of the organ to be found?

In the casts of Jacob Jervis and Henri Quatre, where

it is large. In those of Bellingham, Griffiths, and the Charibs very small; and in those of King Robert Bruce and Gordon, moderate.

You have said that this organ is common to man with the lower animals; how does it manifest itself in the latter?

By a mildness and kindness of disposition.

Have animals that possess a great development or deficiency of this organ, been observed to manifest these qualities in a corresponding ratio?

Yes; invariably. A most satisfactory demonstration of this will be found in the horse. The organ in that animal is situated in the middle of the forehead, a little above the eyes, where a great development or deficiency of it will be found accurately to accord with its character. In the one case it will be good natured and tractable; in the other, vicious and disposed to bite and kick.

Is it established?

Yes.

I.—SENTIMENTS PROPER TO MAN.

What are the Sentiments that are proper to man?

VENERATION, FIRMNESS, CONSCIENTIOUSNESS, HOPE, WONDER, IDEALITY, WIT OR MIRTHFULNESS, and IMITATION.

Are these Sentiments of the same instinctive character as the propensities and the sentiments common to man and animals?

Yes. They are feelings which are blind, and require, consequently, the direction of enlightened intellect as much as the lowest propensities of our nature.

14. VENERATION.

Where is the organ of Veneration situated?

Immediately behind *Benevolence*, at the middle of the coronal aspect of the brain.

What is the function of this faculty?

To produce the feeling of respect and reverence; and, when directed to the Supreme Being, adoration.

What are the results of the predominating energy, and of the deficiency of this feeling?

When it predominates, it is apt to produce a superstitious respect for objects of antiquity; and when very energetic, and combined with a large development of *Hope* and *Wonder*, a high degree of religious enthusiasm, which may terminate in insanity. When very deficient, again, it renders the mind little sensible to these feelings and emotions of respect, but does not necessarily produce profanity.

May an individual have this organ very large, without possessing a high degree of religious feeling?

Yes. Such may be the case if it be not directed to the Supreme Being. Voltaire, in whom the organ was extraordinarily large, affords a striking example of this. He embraced every opportunity of turning religion into ridicule; but still, in him we find the strong manifestation of the faculty, in the high and almost servile degree of deference which he paid to superiors in rank and authority.

Does a full development of this organ lead to any particular mode of religious worship?

No. It imparts the feeling or tendency to *venerate* or *adore*; but the *object* of adoration may depend upon contingent circumstances, such as education, and

the ignorant or enlightened state of the understanding. When the understanding is weak and grossly ignorant, the organ of *Veneration* may lead to the fervent adoration of "stocks and stones." Enlightened intellect only leads us to look to a Being worthy of rational homage.

Where are remarkable developments of this organ to be found?

In the casts of Raphael, Bruce, Martin, and the Negroes, where it is large. In that of Dr. Hette, small.

Is it established?

Yes.

15. FIRMNESS.

Where is the organ of Firmness situated?

Towards the back part of the head, between *Self-Esteem* and *Veneration*.

What is the function of this faculty?

To produce determination, constancy, and perseverance.

How does it manifest itself?

By giving a perseverance to the other faculties, and only to those that are of adequate power in attaining their objects. For example, a person with *Firmness* and *Benevolence* both in large proportion, will persevere in acts of charity; but diminish the *Benevolence*, and it will take another direction. Let *Causality* be the predominant power, and he will delight and persevere in abstract study.

What are the results of the predominating energy, and of the deficiency of this feeling?

When it predominates, it produces stubbornness and obstinacy. When deficient, the person experiences great difficulty in steadily pursuing any particular object, and is apt to yield to the impulses of his predominating feelings.

Where are remarkable developments of this organ to be found?

In the casts of King Robert Bruce, Haggart, and the American Indians, where it is large. In those of Mrs. H—— and Gibson, small.

Is it established?

Yes.

16. CONSCIENTIOUSNESS.

Where is the organ of Conscientiousness situated?

Towards the posterior and lateral parts of the head, on each side of *Firmness*.

What is the function of this faculty?

To produce the feelings of obligation, incumbency, and of right and wrong.

Is justice the result of this sentiment?

Yes, when acting in combination with the intellectual powers.

When it is very energetic or very feeble, what are the results?

When very energetic, the individual is strongly disposed to act justly from the mere love of justice, and is highly disgusted at beholding an action which is in the smallest degree connected with unjust principles. When very feeble, he experiences a difficulty in perceiving the nature of justice, and is very apt to commit

an unjust action under the temptations of interest and inclination.

Where are remarkable developments of the organ to be found?

In the casts of Dr. Hette and Mrs. H——, where it is large. In those of Bellingham, Haggart, and Gibson, small.

Is it established?

Yes.

17. HOPE.

Where is the organ of Hope situated?

Before *Conscientiousness*, on each side of *Veneration*.

What is the function of this organ?

To produce the sentiment of Hope in general, or the tendency to anticipate the fulfilment of what the other faculties may desire.

Has the faculty any influence on a religious character?

Yes; it gives a strong disposition to the exercise of faith, and by looking forward to futurity, impresses a strong belief in a life to come.

What are the results of a predominating energy and of a deficiency of this faculty?

In the former state it disposes to credulity, and leads to rash speculation, magnifying every advantage: in the latter, it is apt to lead to despondency.

Where are remarkable developments of the organ to be found?

In the cast of Raphael, where it is large. In that of Dr. Hette, small.

Is it established?

Yes.

18. WONDER.

Where is the organ of Wonder situated?

Above *Ideality*, and before *Hope*.

What is the function of this faculty?

From a number of observations, it seems to be to give the tendency to believe in inspirations, presentiments, phantoms, &c., and a natural disposition to delight in any thing wonderful and marvellous. Supernatural fictions, mysterious incidents, and every thing out of nature, are the delight of those who possess a large development of the organ. The faculty is still considered as only being probable.

19. IDEALITY.

Where is the organ of Ideality situated?

Immediately above *Acquisitiveness*, and extends forwards over that organ from *Cautiousness*.

What is the function of this faculty?

To produce the feeling of beauty and perfectibility; —to elevate and imbue every idea conceived by the mind with a feeling of exquisiteness and enthusiasm.

When very vigorous, how does it manifest itself?

By a strong tendency to embellish every object in nature with beauty and exaggerated qualities of every description. It is this faculty that gives rise to poetical rapture.

When very deficient, what follows?

A homeliness and simplicity of mind.

Has it any influence over the other mental powers?

Yes. It expands the whole mind, and directs it to objects of an elevated and refined nature.

Where are remarkable developments of it to be found?

In Milton, Shakspeare, Raphael, Wordsworth, Haydon, and Byron, where it is large. In Mr. Hume, Bellingham, and Haggart, small.

Is this organ established?

Yes.

20. WIT, or MIRTHFULNESS.

Where is the organ of Wit situated?

At the side of the forehead, between *Causality* and *Ideality*.

What is the function of this faculty?

According to Dr. Spurzheim, it is to give rise to the feeling of the ludicrous, creating, when strong, an almost irresistible disposition to view every object in that light, while Dr. Gall defines it to be the predominant intellectual feature in Rabelais, Cervantes, Boileau, Swift, Sterne, and Voltaire.

Does this faculty lead to satire?

Yes; when combined with *Combativeness* and *Destructiveness*.

And to humour?

Yes, with *Secretiveness*; the former producing the ludicrous colouring, while the latter supplies the slyness which constitutes humour.

Where are remarkable developments of this organ to be found?

In the portraits and casts of Sterne, Voltaire, and

Henri Quatre, where it is large. In those of Sir J. E. Smith, Mr. Hume, and the Hindoos, small.

21. IMITATION.

Where is the organ of Imitation situated?

At the upper and fore part of the head, on each side of *Benevolence*.

What is the function of this faculty?

To give a talent for imitation in general.

Is it on this account necessary to the artist and player?

Yes. To these it is quite indispensable, but to the eminent success of the latter it must be combined with a full proportion of *Secretiveness*. It is by this latter faculty that he is enabled successfully to conceal his real character, and assume that of the individual he personifies.

Will a large development, then, of these two organs enable him to personify with equal success all characters, whatever their dispositions are represented to be?

By no means. He must likewise possess those faculties strong which form the striking points in the character of the person he represents. For example, to personify an individual of a fiery disposition, he must possess *Combativeness* and *Destructiveness* both large,—for one that is characterized by envy and malevolence he must have in the same degree, *Self-Esteem*, *Love of Approbation*, and *Destructiveness*, which faculties with small *Benevolence*, and *Conscientiousness*, constitute such a character. It is, however, not necessary that in him these two latter faculties be weak; they may be as powerful as the others, and he

may be as able to personify individuals characterized by high *Benevolent* and *Conscientious* feelings as those of an opposite nature.

*Do not the lower animals possess this faculty?**

Yes. Many of them do. Its manifestations are strikingly exhibited in some animals who imitate the voices of others for the purpose of attracting their prey, the more easily to devour it. We have familiar examples of its perfection in the monkey, parrot, and several singing birds.

Where are remarkable developments of the organ to be found?

In Raphael, Clara Fisher, and uniformly in those artists and players who have distinguished themselves for their imitative powers.

Is it established?

Yes.

ORDER II.—INTELLECTUAL FACULTIES.

What is the nature of the Intellectual Faculties?

Their nature is to communicate to man and animals the knowledge of their own existence and that of the external world, and to perceive the qualities and relations of the objects in nature. They consist, as already mentioned, of the *External Senses*, the *Perceptive* and *Reflective Faculties*.

* This faculty perhaps ought to have been placed with *Benevolence* among those that are common to man with the lower animals, on account of many of these possessing it. To prevent confusion, however, by altering the present arrangement, which is followed by the most approved works on Phrenology, and after which the new busts are marked, it has been here adopted.

GENUS I.—EXTERNAL SENSES.

What is the Nature of the External Senses?

The external senses are peculiar kinds of apparatuses by which man and animals are brought into communication with external nature.

Are the external senses directly concerned in the manifestation of mind?

No. They do not form ideas, yet they are indispensably necessary to the action and perfection of the internal perceptive powers.

In what manner are they necessary?

They are inlets to knowledge, furnishing the pabulum for the internal organs. The external senses are adapted for the immediate contact, in various ways, of external existences, but the perception both of the physical qualities and relations of these existences is dependent not upon the external senses, but upon the brain; for the power of perceiving these qualities and relations depends not upon the existence of the external senses alone, but conjointly upon the acuteness of these senses, and the size and energy of the internal cerebral organs.

Name these?

1st, FEELING, or TOUCH; 2d, TASTE; 3d, SMELL;
4th, HEARING; 5th, SIGHT.

GENUS II.—PERCEPTIVE FACULTIES.

What is the nature of the Perceptive Faculties?

Their nature is to take cognizance of the existence and qualities of external objects.

22. INDIVIDUALITY.

Where is the organ of Individuality situated?

At the middle of the lower part of the forehead. A full development of it is indicated by the breadth between the eye-brows.

What is the function of this faculty?

To produce the desire to know objects merely as such, without any reference to their uses or qualities. It gives a talent for observation of that kind which merely includes specific existences, and is on that account indispensable to a genius for such sciences as botany, mineralogy, and anatomy, where abundance of such information exists upon which the faculty can exert itself.

Where are remarkable developments of the organ to be found?

In the French, where it is generally large. It is moderate in the English, and in the Scotch small.

 23. FORM.

Where is the organ of Form situated?

Between the middle of the orbitary plates of the frontal bone on each side of the Crista Galli. Its size is indicated by the width between the eyes.

What is the function of this faculty?

To judge of *Form* in general. It is essential to those engaged in the imitative arts; enables the painter to distinguish the different casts of features and countenances in general; and upon the same principle, is of the most essential service to the mineralogist.

Where is the organ found large?

In the casts of King George III. and of the Chinese skulls.

Is it established?

Yes.

24. SIZE.

Where is the organ of Size situated?

At the inner side of the eye-brow.

What is the function of this faculty?

To judge of *Size* in general. It gives a talent for perspective, and is highly essential to the landscape painter. It enables the individual in whom it is large, to judge of space with great accuracy. Some officers in the army possess this in a high degree in judging of the distance to which their lines will extend, while others are as destitute of the power.

In whom is the organ found large?

In Brunel, Williams, and Douglas.

Is it established?

It is stated as only probable.

25. WEIGHT, OR RESISTANCE.

Where is the organ of Weight situated?

Towards the inner side of the eye-brow, between *Size* and *Colouring*.

What is the function of this faculty?

It seems to be to give the power of judging between the weight or resistance of bodies and their other qualities. It is essential to a genius for mechanics, enabling the individual to judge of momentum and resistance in that branch of science. "The faculty, in high endowment, manifests itself in engineering, in dynamical

skill, in the knowledge and application of mechanical forces," and, probably, gives the power of adapting animal movements to the laws of equilibrium.*

Where is the organ found large ?

In Brunel and Sir Isaac Newton.

Is it established ?

It is stated as only probable.

26. COLOURING.

Where is the organ of Colouring situated ?

At the middle of the arch of the eye-brow, between *Weight* and *Order*. It gives, when large, a projection forwards, or an arched appearance to that part.

What is the function of this faculty ?

To give the power of perceiving colours, and distinguishing between their different shades.

Does not this power belong to the perfectibility of the eye ?

No. There are those who have the most perfect vision, and yet are very destitute of the power of distinguishing colours, while others, whose eyes are by no means remarkable for acuteness of sight, possess the power in a high degree.

What is the result of a large endowment of this faculty ?

A passion for colours, a delight in flowers, painting, enamelling, dying, &c.

Where are remarkable developments of this organ to be found ?

In the portraits of Rubens, Rembrandt, Titian, Salvator Rosa, and Claude Lorraine, where its large

* Vide Phrenological Journal, vol. ii. page 426.

size is indicated by the arched appearance of the eye-brow in its situation; and in the masks of the late Sir Henry Raeburn, Wilkie, and Haydon, by the projection forwards of the eye-brow at that part.

Is it established?

Yes.

27. LOCALITY.

Where is the organ of Locality situated?

A little above the eye-brow, at its outer side.

What is the function of this faculty?

To give the power of recognizing places previously seen or described, and of remembering localities in general. In writing, it gives a talent for describing, and conveying to the mind vivid conceptions of scenery of every description. Combined with *Individuality*, it gives a desire for travelling, and is essential to the topographer, geographer, astronomer, and landscape painter.

Where is the organ found large?

In Kepler, Galileo, Newton, Tycho, Descartes, Sir Walter Scott, and Captain Cook.

Is it established?

Yes.

28. NUMBER.

Where is the organ of Number situated?

A little to the side of the outer angle of the eye. Its large development is indicated, along with a fulness of that part, by a depression of the eye-brow there, or by an elevation at the outer angle of the orbit.

What is the function of this faculty?

To give a talent for calculation in general. Arithmetic, algebra, and logarithms come under its immediate function, but the other branches of mathematics are not its simple results.*

Where is the organ found large?

In the portraits of Euler, Kepler, Laplace, Gassendi, &c., and in George Bidder, Humboldt, and Colburn.

Is it established?

Yes.

29. ORDER.

Where is the organ of Order situated?

At the outer part of the eye-brow, between *Number* and *Colouring*.

What is the function of this faculty?

To produce the instinctive love of order and proper arrangement in general. Those females in whom it is large, will be found taking the greatest pleasure in arranging house affairs methodically, and experiencing the greatest uneasiness at beholding anything out of its proper place or in a state of confusion.

Is it this faculty that gives rise to the idea of classifications and philosophical inferences?

No. This is done by the reflective faculties which perceive the relations and dependencies of these. This faculty is merely concerned with the arrangement of objects as they are physically related.

Is the organ established?

It is considered as only probable.

30. EVENTUALITY.

Where is the organ of Eventuality situated?

At the lower part of the forehead, below *Comparison* and above *Individuality*.

*What is the function of this faculty?**

It seems to be to take cognizance of the active occurrences of life. "Individuals who have it large are attentive to all that happens around them, to phenomena, or events, or facts; they are fond of history, of anecdotes, are inquisitive, and desire information on every branch of natural knowledge."† It conduces to a talent for details, and business of a practical nature, and is hence essential to the lawyer, medical practitioner, &c.

31. TIME.

Where is the organ of Time situated?

Under *Causality* and *Wit*; in a line between the two.

What is the function of this faculty?

To give the power of judging of time and intervals in general. It enables us to judge of the lapse of time from any particular period; gives the musician the power of observing it in performing; and conduces to a talent for harmony and versification.

* Mr Combe thus describes it, distinguishing it from *Individuality*:—"A horse, when at rest, may be considered as an object of mere existence; and as such, is the proper object of *Individuality*. But the horse grows from birth to maturity; its lungs play, its blood circulates, its muscles contract; also it walks, trots, or gallops; these are its *active* phenomena, and of them *Eventuality* takes cognizance. *Individuality* seeks the kinds of knowledge indicated by nouns; while *Eventuality* is conversant with occurrences designated by verbs."

† Spurzheim's Phrenology.

Is this organ established?

It is stated as only probable.

32. TUNE.

Where is the organ of Tune situated?

At the lateral part of the forehead, as near as possible on a line with *Time*.

How is a large development of it indicated?

Either by a pyramidal form, or a largeness and roundness on the lateral parts of the forehead.

Is there any difficulty in ascertaining the development of this organ successfully?

Yes. The beginner experiences it in a considerable degree, but may soon acquire an expertness in distinguishing its various degrees of size, by comparing the heads of individuals possessing opposite talents in that respect.

What is the function of this faculty?

To give the perception of melody.

Does the perception of melody not depend upon the acuteness of the organ of hearing?

No. Many have the organ of hearing in great perfection, who cannot discriminate musical sounds: and many display great musical capabilities in whom the organ of hearing is by no means very acute.

Does a large development of the organ alone constitute a genius for music?

No. This results from the indispensable combination of other faculties with that of *Tune*.

What are these, and how do they act?

The principal are, *Time*, *Ideality*, *Secretiveness*, and

Imitation, which give a just perception of intervals, an elevation and expression to the whole.

Where is the organ found large?

In the representations of Gluck, where it has a pyramidal form. In Mozart, Viotti, Tumsteg, Dussek, and Crescenti, where it is distinguished by a fulness and roundness of the lateral parts of the forehead.

Is it established?

Yes.

33. LANGUAGE.

Where is the organ of Language situated?

On the plate of bone that forms the roof of the eye.

How is its large development indicated?

By a prominence or depression of the eyes.

What is the cause of these two different states?

When the fibres are long, they push the eye forwards, and thus cause the prominence: when thick, the eye is depressed towards the outer angle of the orbit.

What is the function of this organ?

To enable us to acquire a knowledge of natural language, and to confer the power of using artificial signs or words.

Does this faculty of language learn the signification of words?

No. A person who has it powerful may commit to memory various pieces and passages of different descriptions, without much knowledge of their meaning, (the intellectual faculties being feeble,) or any emotion being excited in his mind by them. These are altogether recognised and felt by the other faculties.

When this faculty is very strong, how does it manifest itself?

By an extreme verbosity both in writing and speaking, and, when combined with feeble reflecting powers, by a looseness and inelegance of style; in conversation, by a frequent repetition of the same sentences, notwithstanding their being of the easiest comprehension, and a continual tendency to speak, which is done with such a volubility of tongue and want of reflection, as would indicate that pleasure was experienced in mere articulation.

When very feeble, what is the result?

A difficulty in communicating one's ideas to another, from a want of expression, which frequently causes stammering, and a repetition of the same words, and a meagreness of style in writing.

Where is this organ found large?

In the masks and portraits of Sir J. E. Smith, Humboldt, and Voltaire. In the mask of Fraser it is small.

Is it established?

Yes.

DISTINCTIONS BETWEEN THE FUNCTIONS OF THE OTHER
KNOWING FACULTIES AND INDIVIDUALITY.

It will be here proper to take some notice of the distinction which exists between the other *Knowing Faculties* and *Individuality*. It must be remarked, that the faculties of *Form*, *Colouring*, and *Size* merely take cognizance of these qualities in a separate state, as they exist in an object; they do not themselves constitute the object as a whole, but merely as possessing these qualities. Some faculty, then, is requisite for combin-

ing these, and forming a single intellectual conception out of them, and that is *Individuality*. For example, in looking at a horse we do not observe *Form, Colour,* and *Size* as separate qualities, but we have a single mental conception in which these are combined—the *animal as a whole*: nor, in beholding an army, do we observe these, with *Number* and *Order*, which produce the ideas of plurality, and of arrangement and gradations of rank, as separate qualities. They are all combined by *Individuality*, and we have a single intellectual conception—an *army*.

Individuality, then, combines the aggregate qualities of an object, or, these objects which are taken cognizance of by the other *Knowing Faculties* into an *individual* conception, which is regarded and spoken of as a mere existence, without any relation to its separate qualities.

GENUS III.—REFLECTING FACULTIES.

What is the nature of the Reflecting Faculties?

Their nature is to produce ideas of relation, or to reflect. They constitute what is called Reason or Reflection.

34. COMPARISON.

Where is the organ of Comparison situated?

At the middle of the forehead, above *Eventuality*.

What is the function of this faculty?

To give the power of perceiving resemblances and analogies. It gives the mind a tendency to compare one thing with another, and to suggest resemblances

between objects or ideas, and disposes the individual who has it largely developed to use similitudes in writing and discourse.

Where is this organ found large?

In the portraits and casts of Pitt, Roscoe, Raphael, Burke, John Bunyan, and Mr Hume.

Is it established?

Yes.

35. CAUSALITY.

Where is the organ of Causality situated?

In the forehead on each side of *Comparison*.

What is the function of this faculty?

To produce the idea of Causation, or the connexion between cause and effect, and of their various relations and dependencies. It gives a strong perception of logical consequences, and is a chief element in the talent for abstract study.

When this organ is very large, and Comparison and Individuality small, what is the result?

A strong tendency to engage in speculations, without properly considering the circumstances upon which they are founded, and how far they will be applicable to the affairs of life.

What is the result of a deficiency of this faculty?

A superficialness of intellect, and an extreme difficulty in apprehending abstract science, even in its simplest forms.

Where are remarkable developments of the organ to be found?

In the portraits and busts of Bacon, Kant, Locke, Voltaire, Dr Thomas Brown; and in the masks of

Haydon, Brunel, Burke, Franklin, and Wilkie, where it is largely developed. In Pitt, and Sir J. E. Smith, it is moderate, and in the Charibs and new Hollanders, very deficient.

Is it established?

Yes.

MODES OF ACTIVITY OF THE FACULTIES.

I. OF THE KNOWING AND REFLECTING FACULTIES.

Phrenology, it seems, does not include as mental powers, those particular states which metaphysicians have regarded as such: viz. PERCEPTION, CONCEPTION, IMAGINATION, MEMORY, and JUDGMENT, what does it teach us concerning these?*

That they are merely modes of activity of the Knowing and Reflecting Faculties.

What, then, is PERCEPTION according to this view?

It is the lowest degree of activity of these, and merely consists in their cognizance of objects when presented to them.

Will not Perception then, with regard to particular objects, be more or less perfect, according to the strength or weakness of the faculties that take cognizance of these?

Yes. Each of the faculties receives the impression

* These five comprehend the various degrees of activity of the Knowing and Reflecting Faculties; those of the Propensities and Sentiments will be considered hereafter. It is unnecessary in these pages to take any notice of the other mental states treated of by metaphysicians.

of its object with a vividness and accuracy proportioned to its strength.

What is CONCEPTION?

It is a higher degree of activity of these faculties than Perception, by which objects not present are called into the mind.

What is IMAGINATION?

It is the highest degree of activity of the same faculties, and consists in an impassioned and vivid conception of the objects belonging to these, in every variety of combination.

Is there any material difference between Conception and Imagination?

No. The only difference is, that "the former is the cool and methodical representation of things absent to one's self, or others; the latter is the *impassioned representation* of the same things, and not merely in the forms and arrangements of nature, but in new combinations formed by the mind itself."

Imagination is commonly spoken of as being an attribute peculiar to the poet; is not this, from what you have just now said, an erroneous opinion?

Yes. Imagination may be manifested as powerfully in the mathematician, artist, or metaphysician as in the poet.

What is MEMORY?

It is a particular mode of activity of the same faculties, and consists in recalling impressions into the mind in the order in which they occurred, with the knowledge of these having there previously existed.

Are there, then, as many different kinds of Memory as there are Knowing and Reflecting Faculties?

Yes. We have facts, for example, recalled by Individuality, tones by Tune, calculations by Number, &c., &c.

What is JUDGMENT?

In a metaphysical sense, it is the perception of relation, and belongs to the Reflecting Faculties alone ; although the knowing ones in one sense may be said to possess it. Size, for example, in perceiving the differences of space, and Tune those of tones, may with propriety be said to be so far judging of these. The drawing of inferences, however, from the ideas furnished by the Knowing Faculties, with the perception of the dependencies of phenomena, altogether belong to the Reflecting Faculties ; and constitute, properly speaking, Judgment.

When an individual is observed to follow strictly the moral dictates of humanity, and conduct his affairs in a judicious manner ; is it proper, as is commonly done, to infer that he possesses a "sound judgment ;" and is his conduct merely the result of powerful Reflecting Faculties?

Such an individual may with propriety, in the popular sense of the term, be said to possess a "sound judgment," for in this it is used in a more extensive signification than in its metaphysical meaning ; but his conduct does not sanction the inference of his possessing strong Reflecting Faculties, although such may be the case. A full endowment of the Superior Sentiments, and of Individuality, with these, which may be moderate, is all that is necessary to account for his character. The Reflecting Faculties are certainly required to point out a proper line of conduct, but it is

the moral feelings of the person that prompt him to adopt it.

May an individual, then, who possesses but a very limited endowment of these feelings, with strong Reflecting Faculties, be apt to be led into improper conduct under particular temptations?

Yes: for although his strong intellect may point out the propriety of acting in a conscientious manner, if he has not proper feeling to do so, he is very apt to be led astray by his predominating selfish feelings; and this individual, though, properly speaking, possessed of a strong judgment, will, in the popular signification of the term, be very destitute of it. Such was the case with the illustrious Lord Bacon, who, though possessed of the most transcendent intellect, exhibited a moral depravity rarely to be met with.

II.—OF THE PROPENSITIES AND SENTIMENTS.

The Knowing and Reflecting Faculties, it appears, can be called into action by an effort of the will; or perhaps more properly speaking, they are will themselves, and come into activity by some peculiar effort of their own. Is such the case with the Propensities and Sentiments?

No. We cannot, for example, experience the feelings of Courage, Fear, Compassion, or Sublimity, by merely willing to do so; before such can happen, the objects adapted to excite these must be present. Thus, opposition will cause Combativeness to start into activity, and Courage be the consequence. The approach of danger, in the same way will rouse Cautiousness and

produce Fear ; while an object in distress by appealing to Benevolence commands Compassion, and those of grandeur affecting Ideality, give rise to feelings of Sublimity.

But we sometimes involuntarily experience various feelings, such as fear, or awe, without the objects being present that are calculated to excite these. What does this arise from ?

From an internal excitement of the organs belonging to these, frequently arising from causes altogether unknown ; and when this proceeds to a great extent, the organs take on a diseased action, and by a temporary overpowering of the judgment, induce a belief in the representations which they conjure up ; thus constituting Insanity.

It appears from this, then, that there may be various kinds of Insanity according to the organs affected ; is this the case in nature ?

Yes. Precisely so. By this doctrine all the phenomena of Insanity are explained in the clearest and most satisfactory manner.

GENERAL QUESTIONS.

PRINCIPLES FARTHER CONSIDERED, WITH PRACTICAL APPLICATIONS OF THESE.

May the different mental faculties just gone over not be so modified by external circumstances as to give the individual a totally different character from that which they would lead us to suppose he naturally possessed ?

No. Individuals who are, for example, naturally

strongly addicted to cruelty, avarice, benevolence, or vanity, will, during the course of their lives, possess and manifest the same feelings, although they may be modified to a certain extent by education and example.

Does education strengthen the mental faculties materially?

Yes. But it can never render those powers eminently energetic which are naturally feeble.

Suppose an individual to possess in an eminent degree those natural powers which constitute genius, will these manifest themselves, notwithstanding his being in a situation where they cannot be conveniently cultivated, or in which efforts may be made to suppress them?

Yes. The force of genius will manifest its superiority in despite of every obstacle that circumstances or situation can present. It will ultimately burst forth, and shine in its native lustre in opposition to every effort made to extinguish it. By looking back to the lives of the poets, painters, and artists, in every age, we behold striking examples of this.

What is the phrenological meaning of Activity and its distinction from Power?

Activity means the rapidity with which the faculties may be manifested. Power is merely an indication of the size of the organs.

May great activity exist in these, without their being very fully developed?

Yes. Although the larger organs have the greatest natural tendency to be active, probably owing to the stimulus communicated to them by their being more frequently exercised than the others.

You have said before that all persons do not pos-

sess the same constitution and quality of brain. This, of course, will make some difference in the energy with which two brains of the same size, but which differ in these respects, will manifest themselves: are there any means by which these differences in constitution and quality may be ascertained?

Yes. The temperaments enable us to do so to a considerable extent.

What are the temperaments?

The Lymphatic, Sanguine, Bilious, and Nervous.

How is the Lymphatic temperament distinguished, and what state of Brain is connected with it?

It is distinguished by a general roundness and softness of the body, a fair and clear skin, a languid circulation, with weak vital activity. The brain partakes of the general want of energy, and the manifestations are proportionally weak.

How is the Sanguine temperament distinguished, and what is the state of brain connected with it?

By a well defined and moderate plumpness of form, a firmness of muscle, light hair, blue eyes, ruddy and fair complexion, and is accompanied by an activity in the circulation, and a fondness for exercise. The brain partakes of the general activity of the system, and is active.

How is the Bilious temperament distinguished, and what is the state of brain connected with it?

By much firmness of flesh, by dark skin, black hair, decided features, rough and strongly marked outline of frame, and a general activity of the brain and system, in general.

How is the Nervous temperament distinguished, and what state of brain is connected with it?

By delicacy of form, small muscles, pale countenance, fine hair, and thin skin, by quickness of circulation and muscular motion, and often delicate health. There is a high degree of activity or sensibility of the nervous system, of which the brain as a part of it partakes, and its manifestations are eminently active.

Are these temperaments always pure, or are they frequently mixed?

They are frequently mixed. The most common mixtures are the sanguine-lymphatic, the nervous-lymphatic, and the nervous-bilious.

In judging, then, of the mental manifestations of individuals, must the nature of their temperaments be taken into consideration?

Certainly.

The temperaments, then, will affect both the degree of power and activity with which different brains will manifest their functions?

Yes; in a considerable degree; but, there are some brains more active than others from causes altogether unknown; and one or even two organs sometimes, though unfrequently, exhibit a disproportional degree of activity to the others in the same brain. This probably arises from some internal excitement similar to that which, at times, renders one nerve, as the auditory, more acute in its perceptions than those of the other external senses.

Is there any particular combination of organs when large, that gives a tendency to general activity of the brain?

Yes. A full development of Combativeness, Destructiveness, Acquisitiveness, Love of Approbation,

Firmness, and Hope, is commonly followed by this ; an opposite tendency is the consequence of these organs being small, with Benevolence and Veneration large.

How should the student commence making observations, after having attained a general knowledge of the situation and functions of the organs ?

He should first study the general size and configuration of heads, (remembering that idiocy is invariably the consequence of the brain being too small,) and then of the three orders of organs, and of the proportions which they bear to each other. Being familiar with these, he may proceed to the observation of individual organs, remarking, as he goes along, how the mental manifestations correspond with the cerebral development, and recollecting that it is not the mere prominence he is to look for, but the real dimensions of the organs.

How are the dimensions of the organs to be judged of ?

As size consists either in length or breadth, or in both, it must be judged of in two different ways. The length of an organ is ascertained by its distance from the *Medulla Oblongata* (for here all the organs meet) to the peripheral surface, and may be measured from the ear, which is nearly opposite to that body. The breadth, again, is judged of by its peripheral expansion.

Are there any instruments used for the purpose of ascertaining accurately the size of the organs ?

No ; not altogether. There are two instruments, the Callipers and the Craniometer. The latter measures from the *medulla oblongata*, and is useful in ascertaining the length of the fibre ; but it does not indi-

cate the breadth, which must be judged of by means of the hand or eye. The Callipers merely indicate the general size of the brain: they neither ascertain the breadth nor length of fibre.

Are the phrenological busts of much service to the student of phrenology?

Only in so far as they point out the situations of the organs and their proportions in one head. The varieties of size must be studied from the inspection of a great number of heads, where large developments may be contrasted with great deficiency.

Is the inexperienced observer apt to feel any difficulty in distinguishing the situations of the different organs in their various proportions of development?

Yes. He is apt to be misled with regard to the size of any organ, from the circumstance of those in the neighbourhood being large or small. If they are small, the organ under observation is elevated above them, while, if they are large, there will be no protuberance, but a smooth surface. In the latter state, the organ may appear to him to be smaller than in the former, although it is of the same size, or even larger. He may likewise experience difficulty in distinguishing between two organs, when one of them is very largely developed and the other small, from the circumstance that the large organ sometimes pushes the small one a little out of its place.

How, then, is he to distinguish between the two organs?

By observing the shape of the large one, and where the greatest prominence of it lies, which will be near its centre.

What are the terms that are commonly used for denoting the gradations of size in the different organs?

VERY SMALL.	MODERATE.	RATHER LARGE.
SMALL.	RATHER FULL.	LARGE.
RATHER SMALL.	FULL.	VERY LARGE.

In observing the appearance and manifestations of particular organs in nature, what is the most proper manner in which we should proceed?

To begin with those organs of the larger size, and to compare the cerebral development of persons of opposite dispositions. Thus, the organ of *Cautiousness* may be examined in two individuals, the one being remarkable for timidity and caution, the other characterized by precipitancy and a want of fear. And in the same manner with the other organs.

If two or three or more organs are found large in an individual's head, are we to conclude that his dispositions are good or bad, or what directions his talents will take?

By no means. Before doing so, they must be compared with the other organs in the head of the individual, and it is to be remembered, that it is not the absolute size of the organs, or their size in reference to any standard head, that determines the predominance of particular talents or dispositions, but their size in proportion to that of the other organs in the head of the individual observed. Thus, in the head of Gordon, the murderer, the measurement from *Destructiveness* to *Destructiveness* is $5\frac{1}{8}$ inches, the moral and intellectual feelings are small, *Destructiveness* being the largest organ in his head; and in Raphael it is $5\frac{1}{2}$ inches, but in his head the organs of intellect and of the moral

sentiments are large, and we see their influence. He was a man of an amiable character—Gordon an atrocious murderer.

Suppose a person to possess the animal organs fully developed, and those of the superior sentiments and intellect small, what, then, will be the natural tendency of his mind?

To engage in the lowest pursuits whereby he may obtain the gratification of his predominant faculties.

Suppose exactly the reverse of this development to exist, what will be the result?

A natural tendency (the moral and intellectual faculties predominating) to engage in pursuits of a moral and intellectual nature.

If some of the animal organs be large, and others of the moral and intellectual faculties well developed in the same individual, what will be the result?

The propensities will be directed by the moral and intellectual faculties, and the individual will seek for objects, by which those organs that are large may be gratified.

According to this rule, how will the individual act who has got a large development of the organs of Combateness, Destructiveness, Conscientiousness, and Benevolence?

As *Combateness* and *Destructiveness*, which alone would give rise to rash and impetuous attack, and wanton cruelty, are combined with two faculties of an opposite nature, they will manifest themselves in some way which will not offend these two, but by which all the four may be gratified; and the individual will find a situation in the army, where, fighting in defence of

his own country, they may all receive gratification. Or, combined with strong intellect and moral feeling, they may take another direction, and he will engage in a warfare of another description, but which requires no less courage and spirit of destructiveness. Of such it was by which Luther, John Knox, and others, have raised monuments of eternal fame to themselves.

If a person possess Benevolence and Love of Approbation both large, how will he act?

He will be led to give charity, and to engage in other benevolent actions, which, to gratify his *Love of Approbation*, will be done in such a manner as most likely to call forth the admiration of others.

How will a large Acquisitiveness combined with these, affect his character?

His *Acquisitiveness* will act as a strong barrier against his extending money or property to the objects of his benevolence; but he will be most assiduous in administering personal kindness, and in using his influence and advice to procure that which will conduce to the comfort, and improve the pecuniary circumstances of these.

How will Acquisitiveness and Conscientiousness both large, manifest themselves?

As stealing, which might gratify *Acquisitiveness*, would offend *Conscientiousness*, the individual will endeavour to possess property or money by lawful means, for the purpose of gratifying both.

What combination of faculties constitutes a courageous and prudent character?

A full development of *Combativeness* and *Cautiousness*.

What combination of organs would you expect to find in a person of an envious character, and who had a strong tendency on all occasions to speak lightly of others, to depreciate their talents or censure their characters?

As envy (*Benevolence* and *Conscientiousness* being small) is the result of large *Self-esteem* and *Love of Approbation*, such a combination with large *Destructiveness*, which produces hatred and malice, will be found to exist in such an individual.

How will the equal development of all the organs manifest themselves in an individual?

By exhibiting him in different phases of character, according to the set of faculties that predominate for the time. "He will pass his life alternately sinning and repenting. If external influence is brought to operate upon him, his conduct will be greatly modified by it; if placed, for instance, under severe discipline and moral restraint, these will cast the balance for the time, in favour of the higher sentiments; if exposed to the solicitation of profligate associates, the animal propensities will probably obtain triumphant sway. Maxwell, who was executed for housebreaking and theft, is an example of this combination. In him, the three orders of organs are amply developed, and, while subjected to the discipline of the army, he preserved a fair reputation; but when he fell into the company of thieves, he adopted their practices, and was hanged."*

* Combe.

ON THE
ADVANTAGES OF PHRENOLOGY.

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Is Phrenology as a Science yet perfected?

No; Some of the organs at the basis of the brain lie beyond the reach of observation. The functions of these organs are yet unknown, and conjecture forms no part of the Phrenological system.

Are all the Phrenological organs equally satisfactorily established?

No; Some are established beyond the possibility of doubt:—others have a high degree of *probability* in their favour, and others are still *doubtful*.

Will this state of things continue in Phrenology?

No; As Phrenology is a science of observation it has the elements of renovation and perfection in itself. Time will therefore clear up whatever is dark, and reject, modify, or establish what at present is doubtful.

Is Phrenology ever likely to be generally embraced by society?

If we may judge from what has already taken place, it is probable that, at no distant period, it will supersede every other system of mental Philosophy, although, from the criterion of mental excellence which it establishes, many will at all times oppose it.

What are some of the advantages that would result from the general diffusion of Phrenological knowledge?

The advantages are numerous: some are general, or refer to *society*; and others are more particular, and relate to *individuals*. Society would be benefited by a diffusion of Phrenological knowledge—1st, In a better system of mental philosophy being established, and in the inculcation of more definite and clear views of the state and operations of the human mind; and 2dly, In the practical bearings of Phrenology to Legislation, Insanity and Education. *Individuals* would be benefited by a knowledge of Phrenology, as it is the only science that can enable every one to know himself; that can enable us to turn the talents of individuals to the best account, and that can establish laws and principles for improving the intellectual capacity of individuals and families.

In what manner does Phrenology inculcate clearer and more definite views of human nature than the old Philosophy?

By the simplicity of its nomenclature, and the demonstrative nature of all its facts.

In what manner does Phrenology bear upon Legislation?

By imparting correct ideas of human nature without which all legislative enactments must prove either nugatory or hurtful.

How does Phrenology bear upon the treatment of Insanity?

By leading to just ideas of the proximate cause of that condition of man, it points to the root of the evil,

and indicates, consequently, the proper method of remedying it.

Does Phrenology bear upon the Education of man?

Yes, in two ways : First, by indicating what powers are naturally strongest in any individual, and consequently most worthy of being cultivated ; and, Secondly, by showing the order in which the powers are developed, and consequently the order in which the powers of the mind ought to be trained.*

How is Phrenology capable of improving the intellectual capacities of families and individuals ?

It shows that the natural strength of the mental powers are dependent on physical causes, and that as all the parts of the body, the brain included, are transmitted from parents to offspring, by attending to certain conditions, the human being may as certainly be improved as the physical and instinctive powers of our domesticated animals.

* For a farther illustration of this, see " Philosophy of Phrenology Simplified."





